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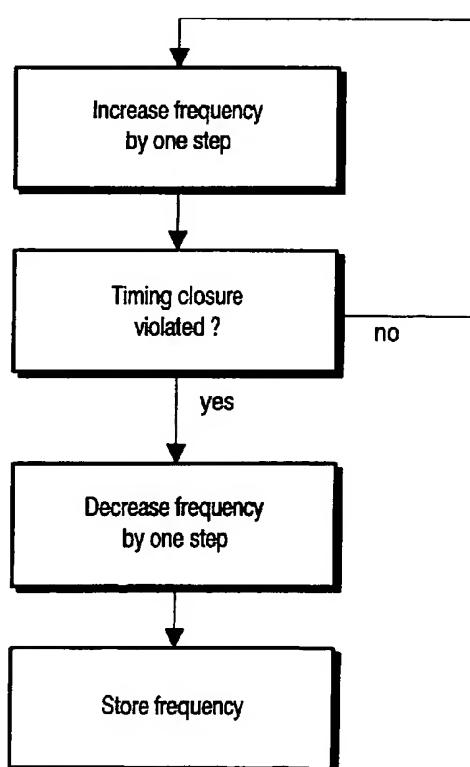
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[Continued on next page]

(54) Title: METHOD AND APPARATUS FOR OVER CLOCKING IN A DIGITAL PROCESSING SYSTEM



(57) **Abstract:** A method of determining a maximum optimum clock frequency at which a digital processing system can operate, the method comprising the steps of: generating a clock signal at an initial frequency; increasing said frequency in a step-wise manner and determining the operation of said system each of a selected number of frequencies, until a clock frequency is identified at which said processor does not operate correctly; and identifying a maximum clock frequency at which said system can operate correctly; characterized in that: said maximum clock frequency comprises the frequency immediately previous to the one identified as being one at which said system does not operate correctly; and in that a timing monitor is provided for determining whether or not said system can operate within system timing constraints at each frequency, thereby indicating whether or not said system operates correctly at the respective frequency.



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